Rural Sociology 66(4), 2001, pp. 557-578

Local Environmental Groups: A Systematic Enumeration in Two Geographical Areas*

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ABSTRACT **Local environmental groups, although acknowledged increasingly since the mid-1980s, have not been sampled systematically, have been reported to consist of only a few types, and are often considered to be of only minor political significance. In this study we systematically inventoried all local environmental groups in two U.S. geographical areas: the Delmarva Peninsula and the state of North Carolina. We found 566 local groups, seven to 20 times the number reported in the best published directory. Threequarters did not fit the types most commonly characterized in the literature. Extrapolating from our study areas, we estimate that 16,000 to 30,000 local environmental groups are active in the United States. We find that these groups have a subset of "core" members, those active in organizing and local operations. We estimate the population of core members at 265,000 to 290,000, over 50 times the total of professional staff members of all U.S. national environmental organizations. These groups affect local and state environmental policy, enforcement of environmental laws, the shaping of environmental issues, and the social infrastructure for environmental behaviors.**

The contemporary environmental movement emerged along with several other "new social movements" during the late 1960s and

***This research is sponsored by Grants SBR-9602016 and SBR-9615505 from the National Science Foundation, on which Kempton and Holland are principal investigators. In addition to the authors, Lesley Bartlett, Thomas Chivens, David Eckert, Cheryl McClary, Jim Poling, Elizabeth Taylor, and Anna White conducted ethnographic research and interviewing. We thank Clinton J. Andrews, Robert Brulle, and Kim Buansi for providing unpublished data. The paper has been improved by comments by Steven Brechin, Frederick Buttel, Thomas Chivens, Riley Dunlap, Elizabeth Shove, Bron Taylor, and three anonymous reviewers. We are grateful to members of many local environmental groups for helping to improve understanding of this movement.**
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early 1970s. Social theorists believe that such movements have largely replaced the labor movement as the principal potential moderating influence on capitalist forms, and assign these movements considerable importance in shaping present-day Western society (Buttel 1992; Calhoun 1993). The literature (cited below) has attributed the movement's influence primarily to large, nationally organized groups such as the Sierra Club, Environmental Defense, and the National Wildlife Federation. These national groups are said to be the primary means by which the environmental movement affects government policy.

In this article we pursue a second, less developed topic: local environmental groups. We call these groups "local" rather than the more common "grassroots" to avoid a priori claims about their origins; a more precise definition is presented shortly. We propose that local environmental groups are not pale, less influential versions of large national organizations but are significant in their own right; this position is consistent with a few other studies of local groups (Carmin 1999; Gottlieb 1993; Gottlieb and Ingram 1988). In our view, local groups also are the key to building the social and cultural infrastructure necessary for sustained environmental practices. Although empirical data on this latter point await completion of our larger project, the work reported here increases the meager documentation on the extent and characteristics of local groups. On the basis of inventories of groups that we conducted in the northeastern and southeastern United States, followed by direct contact with those groups, we develop estimates of the number and characteristics of local environmental groups in the United States.

Foci of Prior Research: Individuals and National Organizations

Existing research on the environmental movement is based primarily on polls of individuals and organizational analysis of national groups. Local groups have been studied occasionally, but only through case studies that lack representative selection of groups; these yield neither the representative samples nor the comparable data needed to develop a systematic understanding of local environmental groups. We first review polls of citizens as a means to study the environmental movement.

Polling of individual citizens is useful in several ways. Polling can be used to chart trends in expressed environmental concern through time (e.g., Dunlap 1992), to measure differences in stated concerns across nations (Brechin and Kempton 1994; Dunlap, Gallup, and Gallup 1993; World Values Study Group 1994), and to discover social correlates of environmental concern (e.g., Jones 1998; Jones and Dunlap 1992; Mohai and Twight 1987). By methodological convention, however, national survey research begins with the taken-for-granted assumption that the unit to be sampled is the

individual citizen, not the community nor the environmental group. The cost of systematically sampling local groups is much higher, the logistics more difficult. Perhaps as a result, we find the existing case studies of local groups too scattered to fill the gaps left by polling disconnected individuals.

Adding to the polling research on individuals are published analyses of the national environmental organizations. In national groups, members are recruited, retained, and informed via mass-mailing techniques not unlike those used to mass-market commodities. Once recruited, members receive a quarterly newsletter, sporadic pleas for donations, and occasional product offers such as T-shirts and bumper stickers (see Mitchell, Mertig, and Dunlap 1992). The national organizations' marketing and publicity efforts make these groups highly visible.

Not surprisingly, when people—scholars and the public alike—think of the environmental movement, they think of national organizations and their members. These organizations can be viewed as including two tiers of participants, One is a populous tier of check writers, T-shirt wearers, and newsletter readers, who express their environmental sentiments primarily through these means. The second tier is a paid professional staff, who conduct the serious work of lobbying, litigating, and other policy-related activities in Washington or some other metropolitan locus of power.

Scholars have not viewed local groups in the same way. Gottlieb says that grassroots groups, in contrast to national groups, "have become organizations of active members rather than rosters of duespayers on mailing lists" (Gottlieb 1988:4-5). Case studies have described a few local groups, but the set of case studies is fairly small and, we shall argue, have been drawn for interest rather than rep resentativeness. As we show in this paper, the reliance of existing case studies on small and biased samples has not been recognized in the literature, resulting in faulty conclusions about local groups. We find three types of local groups mentioned in the literature, sometimes in a single article (Dunlap and Mertig 1992:6), sometimes separately by different authors. The most frequently identified are "oppositional" groups, formed to oppose a single local environmental threat. Cases are reported in books such as Freudenberg's (1984) *Not in Our Backyards!* Other studies have highlighted two more types: "the deep ecology of groups like Earth First! and thousands of local, state and national groups coalescing in a movement for environmental justice" (Edwards 1995:36). Below we summarize these three types of local environmental groups that we find mentioned most often.

The first type, the *oppositional, single-issue group,* is described as forming in reaction to a threat to human health or local aesthetics, with the implication that such groups neither act proactively nor

address a range of environmental problems (e.g., Dunlap and Mertig 1992:6; Freudenberg 1984; Freudenberg and Steinsapir 1992). These groups are often given the pejorative label *NIMBY* ("not in my backyard"); antitoxics groups are the most common of many examples cited.

The second type, *environmental justice groups,* are said to be concerned primarily with environmental problems in poor and minority communities. The term *environmental justice* was coined by Ben Chavis to denote a movement composed of "people of color" (Bullard 1993; Edwards 1995). Some scholars identify local groups more by class, for example, Cable and Cable (1995:104-105) describe grassroots groups as working-class, in contrast to middle-class national environmental groups. Environmental justice groups, too, are often described as single-issue, oppositional, and concerned primarily with hazards to human health rather than threats to nature (Dunlap and Mertig 1992:6).

Third are the *radical groups,* such as Earth First! and the Sea Shepherd Conservation Society. These groups are described as having deep ecological or other ecocentric ideologies, using consensus decision making, and using "direct action" tactics (Taylor 1995, 1997). The popular press often characterizes them as extremists with bizarre beliefs and values.

The above studies that categorize groups are not based on systematic group data; indeed, sampling of groups is rarely even mentioned. Thus we ask Do these three types characterize the population of local environmental groups, or have they been sampled disproportionately for case studies, perhaps because of environmental sociologists' interests in issues of race, class, public protests, and extreme ideologies? This "three type" categorization is beginning to break down in the face of further empirical study (for example, Brulle 2000; Gould, Schnaiberg, and Weinberg 1996; Gottlieb 1993). In addition to the empirical research, scholars are making important efforts to move beyond an ad hoc grasp of the range of groups: they are drawing out the origins and development of both national and local environmental groups in their social, cultural, and historical contexts (e.g., Brulle 1996; Butte1 1992; Gottlieb 1993; Gottlieb and Ingram 1988; McCloskey 1992).

This more recent theorizing and research leads us to suspect that local environmental groups are more diverse and more significant than documented previously. In this article, our contribution is threefold. First, we inventory all local environmental groups in two geographical areas to report counts of groups, total members, and the most highly involved members. Second, from those two areas we project national estimates and compare them with other available data. Third, on the basis of direct contact with the groups, we sketch the types of action undertaken by a sample of these groups

and conclude that existing case studies have led to underestimating of both the diversity of grassroots environmental groups and their importance to environmental behavior and policy.

Defining an "Environmental Group"

As a preliminary to counting local environmental groups, we must define what is, and what is not, an environmental group. We find no comprehensive definition of such groups in the literature. We cannot rely on groups naming themselves as "environmental" because some groups claim to be environmental, while others deny it, for political or tactical reasons. For example, organizer Lois Gibbs is quoted as saying she rejected the label *environmental* for her antitoxic waste group because it would "inhibit organizing" and because her group was about "protecting people, not birds and trees" (Gottlieb 1993:318). Although that organization explicitly rejected the label, we want a definition that would include such an antitoxics group for our study. In our definition:

> A local environmental group is a self-named, voluntary collection of people (or member organizations) who agree on some part of a view of the ethical or appropriate relationship between humans and the world around them, who communicate with each other about this topic, and who perform action in a particular venue in order to advance their view of it.

We define *local* by the social criteria of communication, direct participation, and shared venue, which typically but not necessarily imply geographical proximity of members. The great majority of groups that are local by our social criteria are geographically local as well, as are all those in our current study.

Our definition is motivated in part by the theoretical orientation of our larger project, in which we seek to explain the conditions under which environmental action occurs or fails to occur. We theorize that persons become active environmentally as they come, over time, to identify themselves with the world of environmental action, and learn from others how to be agents in that world (Holland et al. 1998). We believe that the most powerful contexts for action develop in small social groups, where group relationships and activities facilitate change in personal behavior and shape efforts to alter the social and material supports for environmental action.

Creating a group name is one important component of both personal and group identity formation. Our definition requires that the group have a name but not that the name sounds environmental, as mentioned earlier. Moreover, our definition includes, for example, "wise use" groups, whom many would consider antienviron-

mental. To understand and define the movement, we argue, our study must include groups formed in opposition. (The inclusion of arguably antienvironmental groups has a negligible quantitative effect; as we see below, they constitute less than 2 percent of all groups.)

We are not concerned about whether local groups are "grassroots," that is, whether they are formed from spontaneous citizen concern rather than spawned from some larger organization. One interesting finding from our census of groups is that some were formed not by environmentally passionate individuals but by a government agency seeking to fulfill its mission, a high school teacher pursuing curriculum goals, or a national organization seeking to create semiautonomous local units. (When we count members of local chapters of national organizations, we do not use their tally of national members living in the local area; we count only the far fewer members who actually attend meetings, participate in local activities, and the like.)

Table 1 lists elements of our definition of local environmental groups, and links them to the theory and to observations from the resulting data that we have collected.

Methods for Inventorying All Local Groups and Conducting a Census of Groups

As a preliminary step to choosing a sample of local environmental groups for ethnographic study, we developed inventories of all local environmental groups in two areas in the eastern United States: the Delmarva Peninsula and the state of North Carolina. The Delmarva Peninsula includes the state of Delaware and those portions of Maryland and Virginia which lie east of the Chesapeake Bay. To create a census of groups, we compiled multiple local lists and augmented them through our own interviewing and ethnography. Our methods differed slightly in the two locations; we describe each in turn.

For the Delmarva Peninsula, we used the Alliance for the Chesapeake Directory, the Delaware Nature Society Directory of Environmental Groups, participant lists from local conferences addressing environmental issues, the University of Delaware Marine Communications environmental mailing list, state agency lists, Internet searches, newspaper articles, and personal communications. We also used a national list: the 1993 National Wildlife Federation *Conservation Directory* (Gordon 1993), which listed 15 environmental groups in Delaware. We continued the quest for additional local groups as we interviewed and spoke with environmental officials and group members. Interviewing was an important source of data, perhaps the most valuable. We infer that our resulting list of 95 adult environmental groups constituted a nearly complete list be-

Table 1. Components of Our Definition of Local Environmental Groups Related to a Theory of Environmental Action

Component of Definition	Theoretical Rationale	Observations
The group must be self-named.	The naming process is part of the construction of an identity for the group. Self-naming signals that the group seeks to present itself to others.	Self-naming is sometimes motivated by tactics: e.g., a name may be taken when the group participates in public testimony, attempts to recruit new members beyond friends and coworkers, or creates a distinctive local chapter of a national group.
The group is concerned about the relationship between humans and the world around them.	This aspect of our definition is what makes a group "environmental." Groups opposing environmental regulations are included—they are engaged with, and in a broader sense part of, the environmental movement.	What constitutes "environmental" is contested and variable across groups: e.g., pristine nature subject to human damage vs. the environment as a conduit carrying human-made toxins into the community.
The group's idea of the relationship between humans and the world has an ethical component.	The motivation to action is discussed in terms of, and presumably stimulated by, shared ethics.	Groups' particular ethics vary greatly: e.g., "Species have a right to exist without human interference" versus "Corporations have no right to poison our community" versus "Experienced landowners are better stewards of environmental resources than distant bureaucrats."
Members are in communication with one another.	Communication gives the group conceptual resources in common, permits the development of shared interpretations, and allows planning and execution of collective action.	The forms of communication vary: most rely on face-to-face discussion and many rely on' the formal organization of discussions in group meetings. Some rely on phone and e-mail.
Groups undertake actions to advance their view.	Group action contributes to identity formation and furthers the movement's goals for change.	Group actions vary from political to consumer to restorative (e.g., saving oil-soaked water birds), to educational.

cause, over time, interviews with new contacts yielded fewer and fewer new group names. Next we attempted to contact every one of the 95 adult groups. We succeeded in speaking with a group leader and obtaining a reported number of members for 61 (64 percent) of these 95 groups. (Student groups are described below.)

We consider the Delmarva inventory a "census" of local environmental groups. That is, we attempted to enumerate and then contact every single environmental group in the geographical area, much as a government census approaches households. In fact, our inventory was often like a census of the homeless as we tried to track down groups with changed names, individuals with phone numbers no longer in service, and answering machines whose owners never replied. We know of no census of local environmental groups previously reported in the literature.

In North Carolina, the initial task of identifying groups was easier but the next step, a confirming contact and eliciting group membership and characteristics, was more complicated. A local organization, the Environmental Resource Program (ERP) at the University of North Carolina at Chapel Hill, maintains and updates a list of environmental and health groups in order to facilitate communication among them. We trimmed this list by eliminating those groups which we believed did not fit our definition of local environmental groups: for example, we rejected government agencies and purely health-related groups. On the other hand, we added to the ERP list groups that we had located during our ethnographic research in western North Carolina, as well as some that the ERP had excluded. The comparison with our regionally-limited but intensive ethnographic research revealed that the ERP list inadvertently excluded many small groups without presence at the state level, and deliberately excluded the (far less common) wise use and "antienvironmental" groups. The resulting North Carolina list numbered 351—probably an undercount, as described below.

Given the greater distances in North Carolina and the larger number of groups, we did not attempt to contact all groups; instead we chose a probability sample. That is, for North Carolina we constructed an inventory more complete than anything previously available, but because of the state's size and our resource constraints, it was not based on exhaustive area wide interviewing, as was the Delmarva inventory.

We then drew a probability sample of 72 North Carolina groups for more detailed interviewing, rather than a complete census, as in Delmarva. One of these was disqualified because it was a national "chapter"with no local organization. Of the remaining sample of 71 groups, we reached 33 by phone and questioned them about the group's characteristics. Combining these phone contacts with other sources-interviews with nonmembers knowledgeable

about the group, ethnography in some areas of the state, and printed materials—we obtained membership information on 38 of the 71 sampled groups (54 percent).

In both geographical areas, if we had no printed materials for a group and could not contact it by phone, we counted it as having zero membership. We judge that this step results in an underestimate of membership numbers, but also reflects our guess that the smaller groups are less likely to respond or report. The alternative would have been to assume that the uncontacted groups had average membership; that assumption, we judged, would have inflated the membership figures. Telephoning was done by part-time graduate assistants rather than full-time interviewers; thus some return calls probably were missed. Because the North Carolina interviews were conducted under more severe time pressure, this zeroing of nonrespondents probably led to a more severe undercount of members in North Carolina; we discuss this point later.

One question we asked of the groups we contacted was the number of "core" members. We defined core members as those who were most active, who attended meetings or participated regularly in events or activities. When group leaders were asked, they readily identified such a subset. The other members were occasional participants or passive participants, like members of most national environmental organizations.

While we were collecting these data, we encountered a type of group we had not originally envisioned. Both of our geographical areas included high school environmental clubs, which met our definition of local environmental groups. None of the list-based methods revealed these groups, nor did most of the interviewing. Our sources, both of lists and of interviews, were concerned about political action; school groups, however, do not give public testimony, typically do not act in the political sphere, and are not visible in state politics or state environmental agencies. Yet we expected them to be important in creating an environmental identity and fostering some types of environmental action, and they clearly met our definition.

Once we had recognized high, school groups, we inventoried them by contacting all high schools in each geographic area.[1] A knowledgeable person could be reached at only 56 percent of the schools, therefore high school groups were undercounted. Also, we were less successful in obtaining detailed information about membership and activities for these groups than for the adult groups. Thus we include the school groups in our tabulation of the num-

[1]We would have found only slightly more schoo1 groups had we expanded our school search to colleges (of which there are far fewer schools) and to junior high schools (which have fewer clubs of any kind).

Table 2. Enumeration of Adult Groups and Their Members, Excluding School Groups

	Delmarva	North Carolina
Population	1,091,168	6,836,333
Total adult groups	95	351
Groups per capita	1/11,500	1/19,500
Groups with known membership[a]	61 (of 95 population)	38 (of 71 sample)
Range of membership per group	0-8,000	0-2,300
Average members per group	553	387
Average core members per group[b]	31	71[c]
Total core members (per capita)	1,161 (1/939)	7,966 (1/858)
Total members (per capita)	32,602 (1/33)	72,810 (1/94)

[a]Membership numbers from alliances are excluded because their membership figures are based on member organizations and hence are already counted.

[b]Core group members are based on interviews with leaders and thus are drawn from only about 40% of the groups contacted. Total membership is based on interviews as well as on documents.

[c]NC core members include participants in groups that mobilize volunteers for operations such as cleanups. Although they are "active," they are not involved organizationally, as are core members of other groups. If these volunteers were excluded, mean core members in NC would be closer to the counts for Delmarva.

ber of groups, but not in our subsequent tabulations of members, group characteristics, and activities.

To summarize, we inventoried all groups (adult and school) in both areas, using multiple sources and obtaining a more complete inventory of environmental groups than had existed previously. To acquire further information on each group, we then made a census of Delmarva groups, attempting to contact every one, and sampled the larger number of groups in North Carolina.

Findings: The Number of Local Environmental Groups and Core Members

Table 2 presents the results of our group inventory covering the Delmarva census and the North Carolina sample. We find 95 adult groups in Delmarva and 351 in North Carolina, or about one adult local environmental group per 11,500 population in Delmarva and one group per 19,500 in North Carolina. Table 2 also shows average per group of all members (inflated by a few very large groups), and of "core" members. Core members average 31 per group in Delmarva and 71 in North Carolina. The most active or core members account for one per 939 population in Delmarva and one per 858 in North Carolina. (Some individuals may be counted in more than one group, as we discuss shortly.)

How much did we gain by conducting our labor-intensive enumeration and census rather than using published lists of local environmental groups? Table 3 compares the National Wildlife Federa-

Table 3. Counts of Local Enviromnental Groups: Comparison of Published Directory (National Wildlife Federation 1998) with this Study's Enumeration

	Delmarva		North Carolina	
	NWF Directory	Our Census	NWF Directory	Our Inventory
Total groups	17	132	20	434
Adult groups	7	95	19	351
Student groups	0	37	1	83

tion's (1998) *Conservation Directory* with our enumerations. We started our Delmarva list with the 1993 edition of this directory because we judged it the best published source available. We excluded some groups from this list, such as the Delaware Museum of Natural History and the Delaware Forestry Association: from their names we surmised that they were not local environmental groups. Even if this inflation is disregarded, the Delaware listing in the *Conservation Directory* includes only 13 percent of the groups we found in Delmarva, and the North Carolina listing includes only 5 percent of those we enumerated. Equally important, the *Conservation Directory* groups are primarily local chapters of national organizations, professional or semiprofessional associations, and the largest state groups, with names such as the Delaware Bass Chapter Federation, the Professional Bowhunters Society, the Carolina Bird Club, and the Delmarva Ornithological Society. Entirely excluded are the smaller, unaffiliated groups, typically not registered as tax-exempt (often they conduct no financial transactions). These include groups whose names reveal their local focus, such as the Concerned Citizens of Rutherford, the Nanticoke Watershed Protection Committee, Green Delaware, and hundreds more with names unknown to us before this undertaking. Our census of groups produced a list entirely different from this published source, and seven to 20 times larger.

Might the Delmarva Peninsula and the state of North Carolina be misleading as a guide to national characteristics? Certainly a sample of multiple states from different regions would be preferable. For simply judging frequency and membership, however, we offer the rationale that these two areas provide a bracket of the mean national figures. We draw this comparison from Andrews's (1998) data on membership in national environmental organizations. In ranking states by membership in 30 of the largest national environmental groups, Andrews found that Delaware (approximately equal to Delmarva) ranks fourteenth in national environmental group members, whereas North Carolina ranks thirty-fourth. For the United States overall, Andrews found one national

Table 4. Inventories of Delmarva and North Carolina, with Projections to the United States Based on Total Population of each Region

	Count	Per Capita	U.S. Projection
Adult groups			
Delmarva	95	1/11,500	21,627
North Carolina	351	1/19,500	12,755
High school Groups			
Delmarva	37	1/29,400	8,460
North Carolina	83	1/81,950	3,035
Adult plus school groups			
Delmarva	132	1/8,266	30,087
North Carolina	434	1/15,752	15,790
Core members of adult groups			
Delmarva	1,161	1/939	264,875
North Carolina	7,966	1/858	289,881

environmental group member per 57 population. Although Andrews counts national groups and we count local groups, it is reasonable to expect Delaware and North Carolina to bracket the national average in local environmental membership as well. Therefore the use of these two states in our study provides a proxy for a range of estimates of groups and membership nationwide. Consequently we sometimes use the two projections for these two study areas as an estimate of the range of possible national counts.

On the basis of the 1990 U.S. national population (U.S. Bureau of the Census 1996:15), we estimate the total number of local environmental groups and core members in the United States.[2] Table 4 shows these calculations. Projections based on the Delmarva data yield 21,627 adult local environmental groups in the United States; those based on North Carolina yield 12,755 such groups. When high school groups are included, the projected number of groups in the United States jumps to 30,087 if projected from Delmarva and to 15,790 if projected from North Carolina.

As a cross-check on the number of groups, we draw on a study of groups by Brulle (2000). To our knowledge, Brulle has compiled the most thorough national list of environmental groups, using IRS lists checked against national directories of environmental groups. The national directories included the National Wildlife Federation's

[2]Total 1990 population: 248,718,000. Population under age 5: 18,757,000. Population age 5-13: 31,826,000. Population age 14-17: 13,340,000 (U.S. Bureau of the Census 1996:15). Therefore the adult (age 18 and over) population is 184,795,000. We calculated membership rates per unit total population, appropriate for indices. Thus we scaled up the state figures to national estimates via a ratio of total population rather than adult population. Later, however, when we estimate the number of adult members from survey percentages, we use the population of adults because only adults are sampled in these surveys.

Conservation Directory (Gordon 1993), the Gale Directory of Associations (Gale Research 1987), and the *Encyclopedia of Associations* (Manner and Sheets 1988). Using hand screening and making adjustments based on cross-list checks, Brulle arrived at a "minimum" estimate of 14,557 for the total U.S. environmental groups. He calls this estimate a minimum because his IRS and directory sources undercount the smaller groups—those not affiliated with national networks and with annual revenues under $25,000—which Table 3 showed to constitute the majority of our sample. On the other hand, Brulle's list includes national groups as well as multiple local affiliates of national groups, even if they do not hold local meetings nor meet our other criteria. Thus, although we use Brulle as a rough cross-check, this check is not a comparison of like numbers.

As described above, we project from our group inventories a U.S. figure of 16,000 to 30,000 local environmental groups. More comparable to Brulle's estimate of 14,557 would be our estimate of 13,000, to 22,000 adult groups, because the high school groups in our study would be listed neither by the IRS nor in the national directories. The Brulle study thus provides some validation of the national figures we project for local environmental groups. Not surprisingly, we obtain higher estimates of numbers of groups based upon our inventory of groups rather than IRS records and national directories, and because we included school groups.

For a comparison of groups across social movements, consider the Edwards and Marullo (1995) report on peace movement groups. At the peak of the locally based movement, there were 7,700 such groups in the United States (membership figures were not reported). Local environmental groups appear to be two to four times more numerous.

Although the projections of group counts in Table 4 are rather crude, they provide an empirical basis for making national estimates of difficult-to-count local phenomena.

Counts of Memhers: Our Findings and Cross-Checks with Other Studies

Estimating members in groups is more difficult. Our estimate of total members could be low because we did not locate all groups or because we counted membership of uncontacted groups as zero. On the other hand, it could be high because members may belong to more than one of the groups we summed or because group leaders, who provided our membership information, may have inflated their membership to increase their influence. We have counts of individuals' multiple-group membership for the individual core members we interviewed; in the civic groups, the core members we interviewed considered themselves on average to be members of almost three local environmental groups: about two more in addition to the one through which we contacted them. Multiple mem-

berships in local groups presumably would be much lower for non-core members, but we have no count of those. Membership means different things to different groups, many of whom collect no dues and keep no formal membership rosters. With little data on the quantitative effects of these biases, our total membership counts are of limited value in themselves. Thus, after making our estimates, we compare them with data from other studies. For core members, we believed that the reported counts were a more tangible number.

Consider a group organizer responding to our request for a count of "members." He or she might include, for example, those who had once signed a petition or those known to attend county council meetings when called to do so. The same organizer can estimate more tangibly the core members—those who attend many or most meetings and who help out regularly. A few people may be core members of more than one local group; such a commitment, however, would be time-consuming, and it was reported infrequently in individual interviews with core members. As we will see in the survey validation of total membership counts, undercounting is a more serious problem than double counting; thus we do not adjust for it here. (An analyst who wishes to err only on the low side could take our core member estimates and divide (say) by 2 for core participation in more than one group, but this step would not substantially change our conclusions.)

The estimated core members are reported in Table 4. The figures are very similar for the two geographical regions: about one core group member per 900 population, which projects to 265,000 to 289,000 nationally.

It is instructive to compare the core members of local groups with their closest counterparts at the national organizations, the professional staff members. We estimate the professional staff of national environmental groups at approximately 5,500.[3] Thus the local groups' 265,000 to 289,000 core members are 50 times as numerous as the combined staff of all U.S. national environmental organizations.

Together, the data in Table 4 suggest that the number of local environmental groups is impressive, and that, among those individuals in the movement who are working actively on environmental problems, the great majority—about 96 percent—belong to local rather than national groups.

[3]From the *Encyclopedia of Associations* (Manner and Sheets 1998) we count 1,832 total staff members for the 10 largest U.S. environmental groups. The groups we counted were Greenpeace U.S., Natural Resources Defense Council, Sierra Club, National Wildlife Federation, Wilderness Society, National Parks and Conservation Association, National Audubon Society, Environmental Defense, Izaak Walton League, and Friends of the Earth. As a rough comparison, we estimate the staff of all national groups to be three times the total of the 10 largest, for a total of 5,500.

Table 5. Member Counts in Environmental Groups, Comparing Tallies of Group Membership Rolls with Surveys of Individuals (see text)

	Tallies from Member Rolls		Surveys of Individuals		
	This Study, NC	This Study, Delmarva	Andrews (1998)	World Values survey (1990)	Gallup (Dunlap 2000)
Local	1%	3%		>3.4% ("work for")	9%
National + local				8.3% ("belong to")	16%
National			2%		5%

For the reasons mentioned above, we were also uncertain about the accuracy of counts of total members. The mean for total members was less tangible than core members, and we had no reliable estimate of double counting. Rather than presenting total membership counts as a finding, we believe they may be more valuable methodologically—for comparison with other methods and in raising measurement questions to improve future studies.

In Table 5 we present our membership count as a percentage of the population, and compare it with other studies using two methods: counting group rolls (like ours) and surveys of individuals. First, we compare our results with one other study based on counting group members (Andrews 1988). Andrews found a national average of one environmental group member per 57 population; we enter this as 2 percent in Table 5. The Andrews study, mentioned earlier, counted the 30 largest environmental groups.

Second, in Table 5 we compare our results with two surveys of individuals who were asked whether they belonged to an environmental organization. The first survey is a 1990 U.S. national sample. from the World Values Survey (WS). For the two question items relevant here, 8.27 percent responded that they "belonged to" a voluntary organization involved with "conservation, the environment, ecology," and 3.37 percent said they did "unpaid, voluntary work for" such an organization (World Values Study Group 1994). We interpret "belong to" as meaning that the respondent is a member of a national or a local group, and those doing "unpaid work for" as a subset of members of local groups.

The second survey of individuals was also a U.S. national sample, conducted in April 2000 by the Gallup Organization (Dunlap 2000). This survey is of the highest quality for our purposes: it is recent, it covers a large national sample, and, for the first time, it asks specifically about the types of groups in question. Dunlap found that 5 percent of respondents reported belonging to large national and international organizations, whereas 9 percent reported membership in groups and organizations in their local community, re-

gion, or state. In an additional, separate question they were asked whether they considered themselves "an active participant in the environmental movement," "sympathetic . . . but not active," "neutral," or "unsympathetic." Sixteen percent answered that they were an "active participant" (Dunlap 2000). This number is consistent with the 5 percent plus 9 percent who reported national and local group membership.

Table 5 tabulates these two surveys alongside Andrews's and our "member roll" counts from environmental organizations. The numbers resulting from summing membership from organizations' rolls are substantially less than the counts from survey research. This finding suggests that the inflationary problem of double counting members in more than one group is much less than the deflationary problems of (1) not finding all groups, (2) incomplete membership rolls, and (3) some people's view of themselves as "belonging to" groups, while the leaders of those groups consider them only (for example) "supporters." The discrepancy is larger than we can comfortably attribute to error, and it may point to interesting differences in local organizers' and local participants definitions of membership. Thus we regard this discrepancy as indicating an area for future research.

Activities of Local Environmental Groups

In addition to counting local environmental groups and members, we wished to learn whether their orientation and activities had been represented accurately by the case studies to date. As we stated earlier, the literature characterizes local environmental groups primarily as one of three types: single-issue oppositional, radical, or environmental justice.

We coded group characteristics for a subset of the groups. We obtained this information for the Delmarva groups through our census, as well as from reports about groups by other group members, their own literature, and newspaper accounts. As a result, we obtained information from 81 to 94 percent of our total Delmarva inventory. (The percentage varies according to the variable under consideration.) In North Carolina, from our sample of 72 groups, 34 answered questions about their activities by phone. (Because of the small size of the set, the sampling error is high for North Carolina.)

Table 6 displays a list of these groups' characteristics. The percentages are similar across the two regions. We begin by discussing the three types implied in the literature to be most common: oppositional, radical, and environmental justice groups. We find that only 20 to 23 percent of the groups were formed in opposition to a local environmental threat, a figure much smaller than implied by the emphasis that oppositional groups receive in the literature.

Table 6. Selected Characteristics of Adult Environmental Groups in Delmarva and North Carolina[a]

	Delmarva Census (N= 61)	North Carolina Sample (N = 34)
Opposing and initiating characteristics		
Formed as single-issue, oppositional	16 (20%)	8 (23%)
Initiate actions (vs. only react)	52 (68%)	22 (64%)
Primary activity		
Direct action tactics	6 (7%)	1 (2%)
Environmental justice	0 (0%)	0 in sample; 17 in state (5%)
Animal interests	15 (17%)	2 (5%)
Park or refuge support	6 (7%)	3 (8%)
Wise use or property rights	2 (2%)	0 (0%)
Personal consumption management	0.5 (0.7%)[b]	1 (2%)
Group outings	2.5 (3%)	10 (29%)
Alliances		
Chapter of national group	24%	14%
Belong to regional alliance	16%	8%

[a] Characteristics (other than primary activity) are nonexclusive, so columns sum to more than 100%. Percentages are calculated from the groups for which the characteristic was determinable. This varies from 81% to 94% across characteristics.

[b] Halfcounts indicate that coders could not identify a single primary activity, and thus counted as half each of hvo main activities of the group.

Rather than acting in response to others, 64 to 68 percent initiate actions such as lobbying, education campaigns, cleanup, or other activities. For direct action groups, we counted those who employ tactics such as protests, picketing, or physical acts that block activities, and found only 2 to 7 percent. Not all of these groups hold "radical" ideologies; the set of groups which, on the basis of their stated beliefs, hold deep ecology and other radical viewpoints (not tabulated separately) is only a small portion of those who employ direct action tactics. We did not find any environmental justice groups in our Delmarva study area, nor in the North Carolina sample of 72 groups. In the full North Carolina data, however, augmented by unpublished work by Rim Buansi, we found 17 environmental justice groups overall (5 percent of groups in the state). Thus the zero environmental justice groups for the North Carolina sample, as shown in Table 6, are an undercount due to sampling error. Several subsequent inquiries in Delmarva yielded no environmental justice groups, although there are several just outside the area. Even at 5 percent for North Carolina statewide, these groups also account for smaller percentages than their emphasis in the literature would suggest.

Yet even when we add all three of the types represented in Table

6, we find that they account for only about onequarter (25 to 27 percent) of our sample. Wise use groups, which also receive a great deal of public attention, were virtually nonexistent at 2 percent and 0 percent in our two geographical areas. (Presumably they would have been more frequent in the West.)

Initially we, and subsequently the reviewers of this paper, were surprised that oppositional groups are not in the majority, and that the types of local groups widely publicized in case studies in fact are rare. We have rethought our sample and our methods, and have looked extensively, especially for wise use and environmental justice groups. Their numbers are surprisingly low, we conclude, not because of some bias in our methods, but because previous literature on local groups has been based on case studies that selected "interesting cases" rather than on systematic enumeration of local groups.

We made a rough classification of each group's primary activity, as shown in Table 6, by examining a diverse set of their characteristics. We did this in order to group the mass of cases; the grouping was not theoretically motivated. As noted previously, the categorization is based on varying qualities of information, ranging from a single brochure to an extensive phone interview. Because these "primary activities" are primary, they are mutually exclusive. For example, a group which raises money for wildlife refuges and parks, and which also conducts educational activities in parks, we categorized as primarily "park or refuge support", not "educational." We classified "animal interests" as primary for groups such as hunters, fishermen, or birders, who focus on habitat conservation; we also placed animal rescue groups in this category if they were environmentally linked: for example, if they clean birds caught in oil spills. Other types shown in the table are self-explanatory: wise use, environmental justice, groups helping members to manage personal consumption to reduce their environmental impact, and those with nature outings as their primary activity. Nine groups in Delmarva specialized in buying land for habitat preservation (not shown in the table).

Another characteristic of the groups listed in Table 6 is their relationship to national groups or regional alliances. Twenty-four percent of Delmarva groups are local chapters of national groups; 16 percent of the local groups belong to regional alliances. For the North Carolina sample these numbers are smaller: 14 percent and 8 percent respectively. (As stated previously, chapters and alliance members are included only if they meet our definition of a local group.) Regional alliances exercise little policy authority over their constituent groups; they primarily provide services such as tutoring on how to influence local planning or instruction in direct action tactics.

In sum, although our samples and our categorizations of primary activity may be imperfect, they offer a snapshot of local environmental

groups' real activities. Perhaps the main lessons to be drawn are that most local environmental groups do not fit the categories claimed in the literature, and that no single activity or group type characterizes more than one-fifth of the groups. They are a diverse lot.

Local Environmental Groups and Political Action

A final characteristic of environmental groups is their engagement in political activity, coded only for the Delmarva groups (and thus not shown in Table 6). We found that political activity was the primary activity for more than half of the Delmarva groups. To clarify our finding that political activities were the primary focus for this proportion of the groups, we describe our coding of this characteristic. We coded groups as primarily political on the basis of activities such as attending and speaking at government-related gatherings, including public hearings or county council meetings. We also applied this code if they worked with state legislators through lob bying, took legislators on outdoor excursions to experience the environmental resource in question, or acted as local experts on environmental issues for the legislator. Political groups comment on proposed federal environmental regulations, litigate environmental issues, and are invited to participate in government advisory committees. Political activities also consist of conducting workshops on issues, distributing flyers, and writing letters to the newspaper. In addition, some "educational" activities are politically motivated when groups attempt to raise public support for their perspective on issues.

We applied the code "not political" to groups whose primary activities (for example) were buying land for conservation, helping members reduce the environmental impact of consumption, financially supporting national wildlife reserves, leading group nature outings, working primarily with schoolchildren, maintaining nature trails, or holding educational workshops. In short, this coding revealed that the majority of local environmental groups are what we might call "civic groups," politically involved in their communities and engaged with local government.

Conclusion

We find environmental groups to be more numerous, more diverse, and more politically focused than suggested by most of the research literature on the environmental movement. These conclusions are based on our extensive inventories of local groups in two geographical areas—a method not previously applied to this subject—followed by further data from a census of groups in one area and a sample of groups in the other. These methods allowed us to provide rough estimates of the number of groups, members, and types of groups. We also found unexpected organizations, especially stu-

dent groups, which constituted onequarter to one-third of the total sample of groups. We cross-checked the numbers of members against other studies we reviewed.

We also reached several methodological conclusions. Taking a census of local environmental groups is expensive in time and effort, but it greatly increased our understanding of the number and range of groups: we found seven to 20 times as many groups as were listed in a published directory. For members, however, counting group rolls appears to seriously underestimate the number of members of these groups. Even for our most complete census of groups (in Delmarva), the membership-roll estimation of total members of local environmental groups was one-third as great as reported by a Gallup survey: 3 percent versus 9 percent. We cannot definitively explain this discrepancy: for example, whether it is due more to unlocated local groups or to survey respondents who define themselves as members in greater numbers than do the local group leaders. Understanding this discrepancy is a topic for future research. A related question is the role of what we call "core" members and how they coordinate their actions to make these local groups work. Core members are also important in a practical sense: the number of these active individuals is surprisingly large, approximately 50 times the staff of national environmental organizations.

Our next phase of data collection, now being analyzed, consists of participant observation and personal interviews with group members. These methods are revealing that local groups, in addition to their political activities, are instrumental in developing environmentally concerned local publics as well as citizens who identify themselves as environmentalists and practice environmental activism (Kitchell, Hannan, and Kempton 1999; Kitchell, Kempton, Holland, and Tesch 2000).

The nature of local groups, and their significance in comparison with the national groups, is summarized as follows by the organizer[4] of a local group in Delmarva:

> My original thinking about [national] environmental groups [was that] . . . they were going to be at the forefront of any fight. . . . And I've lost that sense . . . maybe these big groups can work in Congress and work in the [state] legislature and do the lobbying, but that's not gonna solve the problem. You need the people out there who are going to walk the neighborhoods and test the streams and keep going to planning and zoning meetings and pay attention to what's happening in the county commissioner's [office]

[4]Quoted verbatim from an interview with Alexis (a pseudonym); square brackets indicate our clarifications.

> and their little town governments, and actually get out there and do the job. So my view of [the solution to the environmental problem] has changed now to the local person who personally gets involved in everything and actually takes an active stand in doing it ...

As this quotation illustrates, local environmental groups are significant in expanding the structures for environmental action and thereby working environmentalism into the fabric of everyday life, routine public discourse, and myriad local policy decisions.

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